SEQUENCE LISTING

<110> Huston, James s
Messer, Anne
Lecerf, Jean-Michel

<120> METHODS AND COMPOSITIONS FOR INHIBITING POLYPEPTIDE ACCUMULATION ASSOCIATED WITH NEUROLOGICAL DISORDERS

<130> INR-004CP

<140>
<141>

<150> 60/146,047
<151> 1999-07-27

<160> 45

<170> PatentIn Ver. 2.0

<210> 1
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> The VH sequence uses a V segment of the VH3 family.

<220>
<223> CDR1 sequence: from base 91 to base 105 (15 bases).

<220>
<223> CDR2 sequence: from base 148 to base 198 (51 bases).

<220>
<223> CDR3 sequence: from base 295 to base 312 (18 bases).

<400> 1
caggtgcagc tgcaggagtc gggggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agttatagca tgagctgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagcaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
cttcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gagagatagg 300
tacttcgatc tctggggccg tggcaccctg gtcaccgtct cctca 345

<210> 2
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

construct

<400> 2
Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ser Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Arg Tyr Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 3
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> The VL sequence uses a V segment of the VL2 family.

<220>
<223> CDR1 sequence: from base 67 to base 108 (42 bases).

<220>
<223> CDR2 sequence: from base 154 to base 174 (21 bases).

<220>
<223> CDR3 sequence: from base 271 to base 294 (24 bases).

<400> 3
cagtctgccc tgactcagcc tgcctccgtg tctgggtctc ctggacagtc gatcaccatc 60
tcctgcactg gaaccagcag tgacattggt gcttataact atgtctcctg gtaccagcag 120
tatccaggca aggcccccaa actccttatt tatgatgtca gtaatcggcc ctcagggatt 180
tctaatcgct tctctggctc caagtctggc gatacggcct ccctgaccat ctctgggctc 240
caggctgagg acgaggctga ttattactgc agctcatttg cgaacagcgg ccccttattc 300
ggcggaggga ccaaggtcac cgtccta 327

<210> 4
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 4

```
Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
  1               5                  10                  15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Ile Gly Ala Tyr
             20                  25                  30

Asn Tyr Val Ser Trp Tyr Gln Gln Tyr Pro Gly Lys Ala Pro Lys Leu
         35                  40                  45

Leu Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Ile Ser Asn Arg Phe
     50                  55                  60

Ser Gly Ser Lys Ser Gly Asp Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65                  70                  75                  80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Phe Ala Asn Ser
                85                  90                  95

Gly Pro Leu Phe Gly Gly Gly Thr Lys Val Thr Val Leu
            100                 105
```

<210> 5
<211> 717
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 5

```
caggtgcagc tgcaggagtc gggggggaggc ttggtacagc ctgggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agttatagca tgagctgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagcaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
cttcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gagagatagg 300
tacttcgatc tctggggccg tggcaccctg gtcaccgtct cctcaggtgg aggcggttca 360
ggcggaggtg gctctggcgg tggcggatcg cagtctgccc tgactcagcc tgcctccgtg 420
tctgggtctc ctggacagtc gatcaccatc tcctgcactg gaaccagcag tgacattggt 480
gcttataact atgtctcctg gtaccagcag tatccaggca aggcccccaa actccttatt 540
tatgatgtca gtaatcggcc ctcagggatt tctaatcgct tctctggctc caagtctggc 600
gatacggcct ccctgaccat ctctgggctc caggctgagg acgaggctga ttattactgc 660
agctcatttg cgaacagcgg ccccttattc ggcggaggga ccaaggtcac cgtccta    717
```

<210> 6
<211> 239
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic construct

<400> 6

```
Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
  1               5                  10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
             20                  25                  30

Ser Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
         35                  40                  45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
     50                  55                  60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65                  70                  75                  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                 85                  90                  95

Ala Arg Asp Arg Tyr Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Thr
            100                 105                 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
        115                 120                 125

Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro
    130                 135                 140

Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Ile Gly
145                 150                 155                 160

Ala Tyr Asn Tyr Val Ser Trp Tyr Gln Gln Tyr Pro Gly Lys Ala Pro
                165                 170                 175

Lys Leu Leu Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Ile Ser Asn
            180                 185                 190

Arg Phe Ser Gly Ser Lys Ser Gly Asp Thr Ala Ser Leu Thr Ile Ser
        195                 200                 205

Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Phe Ala
    210                 215                 220

Asn Ser Gly Pro Leu Phe Gly Gly Gly Thr Lys Val Thr Val Leu
225                 230                 235
```

<210> 7
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 7
tcaccgtctc ctcaggtgga ggcggttcag gcggaggtgg ctct 44

<210> 8
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 8
tgggtgagct catgtccgmt ccgccaccgc cagagccacc tccgcctg 48

<210> 9
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 35 glutamine (Q) residues

<400> 9
Leu Val Pro Arg Gly Ser Val Ser Thr His His His His His Xaa His
1 5 10 15

His Gly Asn Ser Gly Pro Pro Glu Phe Pro Gly Arg Leu Glu Arg Pro
20 25 30

His Arg Asp
35

<210> 10
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 25 glutamine (Q) residues

<400> 10
Leu Val Pro Arg Gly Ser Met Ala Thr Leu Glu Lys Leu Met Lys Ala
1 5 10 15

Phe Glu Ser Leu Lys Ser Phe Xaa Leu Gln Pro Gly Ser Thr Arg Ala
20 25 30

Ala Ala Ser
35

<210> 11
<211> 34

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 42 glutamine (Q) residues

<400> 11
Leu Val Pro Arg Gly Ser Met Ala Thr Leu Glu Lys Leu Met Lys Ala
1 5 10 15

Phe Glu Ser Leu Lys Ser Phe Leu Gln Pro Gly Ser Thr Arg Ala Ala
20 25 30

Ala Ser

<210> 12
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 47 glutamine (Q) residues

<400> 12
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Xaa

<210> 13
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 72 glutamine (Q) residues

<400> 13
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Xaa

<210> 14
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 104 glutamine (Q) residues

<400> 14
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Xaa

<210> 15
<211> 52
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 47 glutamine (Q) residues

<400> 15
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Xaa Leu Gln Pro Gly Gly Ser Thr Met Ser Arg Gly Pro Phe Glu
20 25 30

Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Met His Thr Glu His His
35 40 45

His His His His
50

<210> 16
<211> 52
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 72 glutamine (Q) residues

<400> 16
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Xaa Leu Gln Pro Gly Gly Ser Thr Met Ser Arg Gly Pro Phe Glu
20 25 30

Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Met His Thr Glu His His
35 40 45

His His His His
50

<210> 17
<211> 52
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 104 glutamine (Q) residues

<400> 17
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Xaa Leu Gln Pro Gly Gly Ser Thr Met Ser Arg Gly Pro Phe Glu
20 25 30

Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Met His Thr Glu His His
35 40 45

His His His His
50

<210> 18
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 25 glutamine (Q) residues

<400> 18
Ile Asp Gly Gly Gly Gly Gly Lys Gly Pro Val Thr Gly Thr Gly Ser
1 5 10 15

Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
20 25 30

Phe Xaa Leu Gln Pro Arg Ile Leu Thr Asn
35 40

<210> 19

<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 104 glutamine (Q) residues

<400> 19
Ile Asp Gly Gly Gly Gly Gly Lys Gly Pro Val Thr Gly Thr Gly Ser
1 5 10 15

Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
20 25 30

Phe Xaa Leu Gln Pro Arg Ile Leu Thr Asn
35 40

<210> 20
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<220>
<223> where X represents 81 glutamine (Q) residues

<400> 20
Ile Asp Gly Gly Gly Gly Gly Lys Gly Pro Val Thr Gly Thr Gly Ser
1 5 10 15

Val Ser Thr His His His His His Xaa His His Ser Gly Pro Pro Glu
20 25 30

Phe

<210> 21
<211> 79
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 21
Met Ala Thr Leu Glu Lys Leu Met Lys Ala Phe Glu Ser Leu Lys Ser
1 5 10 15

Phe Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
20 25 30

Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro Pro Pro Pro Pro Pro
35 40 45

Pro Pro Pro Gln Leu Pro Gln Pro Pro Pro Gln Ala Gln Pro Leu Leu
50 55 60

Pro Gln Pro Gln Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Gly
65 70 75

<210> 22
<211> 70
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 22
His Pro Glu Ala Ala Ser Ala Ala Pro Pro Gly Ala Ser Leu Leu Leu
1 5 10 15

Leu Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
20 25 30

Gln Gln Gln Gln Gln Gln Glu Thr Ser Pro Arg Gln Gln Gln Gln Gln
35 40 45

Gln Gly Glu Asp Gly Ser Pro Gln Ala His Arg Arg Gly Pro Thr Gly
50 55 60

Tyr Leu Val Leu Asp Glu
65 70

<210> 23
<211> 64
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 23
Gly Ala Gln Glu Thr Ala His Pro Pro Val Ala Thr His His His His
1 5 10 15

His Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln His
20 25 30

His Gly Asn Ser Gly Pro Pro Pro Pro Gly Ala Phe Pro His Pro Leu
35 40 45

Glu Gly Gly Ser Ser His His Ala His Pro Tyr Ala Met Ser Pro Ser
50 55 60

<210> 24
<211> 81
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 24
Leu Leu Ala Asn Met Gly Ser Leu Ser Gln Thr Pro Gly His Lys Ala
1 5 10 15

Glu Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln His Gln His
20 25 30

Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln His
35 40 45

Leu Ser Arg Ala Pro Gly Leu Ile Thr Pro Gly Ser Pro Pro Pro Ala
50 55 60

Gln Gln Asn Gly Tyr Val His Ile Ser Ser Ser Pro Gln Asn Thr Gly
65 70 75 80

Arg

<210> 25
<211> 72
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 25
Arg Pro Ala Cys Glu Pro Val Tyr Gly Pro Leu Thr Met Ser Leu Lys
1 5 10 15

Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
20 25 30

Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro Ala Ala Ala Asn Val Arg
35 40 45

Lys Pro Gly Gly Ser Gly Leu Leu Ala Ser Pro Ala Ala Ala Pro Ser
50 55 60

Pro Ser Ser Ser Ser Val Ser Ser
65 70

<210> 26
<211> 72
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 26
Glu Glu Leu Arg Lys Arg Arg Glu Ala Tyr Phe Glu Lys Gln Gln Gln
1 5 10 15

Lys Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
20 25 30

Gln Gln Gln Gln Gln Gln Gln Arg Asp Leu Ser Gly Gln Ser Ser His
35 40 45

Pro Cys Glu Arg Pro Ala Thr Ser Ser Gly Ala Leu Gly Ser Asp Leu
50 55 60

Gly Lys Ala Cys Ser Pro Phe Ile
65 70

<210> 27
<211> 80
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 27
Gln Pro Ile Gln Asn Thr Asn Ser Leu Ser Ile Leu Glu Glu Gln Gln
1 5 10 15

Arg Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
20 25 30

Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
35 40 45

Gln Gln Gln Gln Gln Gln Gln Ala Val Ala Ala Ala Ala Val Gln Gln
50 55 60

Ser Thr Ser Gln Gln Ala Thr Gln Gly Thr Ser Gly Gln Ala Pro Gln
65 70 75 80

<210> 28
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 28
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala

1 5

<210> 29
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 29
Tyr Asp Val Pro Asp Tyr Ala Thr Pro Pro Leu Leu Leu Leu Val
1 5 10 15

<210> 30
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 30
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Ser Asp Lys Gln Thr Leu Leu
1 5 10 15

Gln Asn Glu Gln Leu Tyr Gln Pro Leu
20 25

<210> 31
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 31
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Ser Lys Asp Gly Lys Lys Lys
1 5 10 15

Lys Lys Lys Ser Lys Thr Lys Cys Val Ile Met
20 25

<210> 32
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 32

Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Ser Glu Lys Asp Glu Leu
1 5 10 15

<210> 33
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 33
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Ser Lys Leu
1 5 10

<210> 34
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 34
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala His Ile Lys Val Arg Arg Lys
1 5 10 15

Asn Ile Phe Glu Asp Ala Tyr Gln Glu Ile Met Arg Gln Thr Pro Glu
20 25 30

Asp Leu Lys Lys Arg Leu
35

<210> 35
<211> 41
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 35
Met Ile Lys Phe Asp Gly Glu Glu Gly Leu Asp Tyr Gly Gly Val Ser
1 5 10 15

Arg Glu Phe Phe Phe Leu Leu Ser His Glu Met Phe Asn Pro Phe Tyr
20 25 30

Cys Leu Phe Glu Tyr Ser Ala Tyr Asp
35 40

<210> 36
<211> 40
<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 36
Asn Tyr Thr Ile Gln Ile Asn Pro Asn Ser Gly Ile Asn Pro Glu His
1 5 10 15

Leu Asn Tyr Phe Lys Phe Ile Gly Arg Val Val Gly Leu Gly Val Phe
20 25 30

His Arg Arg Phe Leu Asp Ala Phe
35 40

<210> 37
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 37
Phe Val Gly Ala Leu Tyr Lys Met Met Leu Arg Lys Lys Val Val Leu
1 5 10 15

Gln Asp Met Glu Gly Val Asp Ala Glu Val Tyr Asn Ser Leu Asn
20 25 30

<210> 38
<211> 43
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 38
Trp Met Leu Glu Asn Ser Ile Asp Gly Val Leu Asp Leu Thr Phe Ser
1 5 10 15

Ala Asp Asp Glu Arg Phe Gly Glu Val Val Thr Val Asp Leu Lys Pro
20 25 30

Asp Gly Arg Asn Ile Glu Val Thr Asp Gly Asn
35 40

<210> 39
<211> 43
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

construct

<400> 39
Lys Lys Glu Tyr Val Glu Leu Tyr Thr Gln Trp Arg Ile Val Asp Arg
1 5 10 15

Val Gln Glu Gln Phe Lys Ala Phe Met Asp Gly Phe Asn Glu Leu Ile
20 25 30

Pro Glu Asp Leu Val Thr Val Phe Asp Glu Arg
35 40

<210> 40
<211> 43
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 40
Glu Leu Glu Leu Leu Ile Gly Gly Ile Ala Glu Ile Asp Ile Glu Asp
1 5 10 15

Trp Lys Lys His Thr Asp Tyr Arg Gly Tyr Gln Glu Ser Asp Glu Val
20 25 30

Ile Gln Trp Phe Trp Lys Cys Val Ser Glu Trp
35 40

<210> 41
<211> 44
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 41
Asp Asn Glu Gln Arg Ala Arg Leu Leu Gln Phe Thr Thr Gly Thr Ser
1 5 10 15

Arg Ile Pro Val Asn Gly Phe Lys Asp Leu Gln Gly Ser Asp Gly Pro
20 25 30

Arg Arg Phe Thr Ile Glu Lys Ala Gly Glu Val Gln
35 40

<210> 42
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 42
Gln Leu Pro Lys Ser His Thr Cys Phe Asn Arg Val Asp Leu Pro Gln
1 5 10 15

Tyr Val Asp Tyr Asp Ser Met Lys Gln Lys Leu Thr Leu Ala Val Glu
20 25 30

Glu Thr Ile Gly Phe Gly Gln Glu
35 40

Sub A1 cont.

<210> 43
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 43
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5

<210> 44
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 44
Thr Pro Pro Leu Leu Leu Arg Leu Val
1 5

<210> 45
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic construct

<400> 45
Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10